

The risk of tuberculosis related to anti-TNF therapies - TBNET consensus statement

Ivan Solovic
Catholic University, Slovakia

TNF- α inhibitors are a breakthrough in the history of binder treatment of inflammatory diseases. Blocking of TNF- α by the anti-TNF antibodies leads to an inhibition of the pathological inflammatory process at the multiple levels and it is therefore currently the most effective healing modality for many diseases such as rheumatoid arthritis (RA), psoriatic arthritis, ankylosing spondylarthritis, juvenile idiopathic arthritis, but also inflammatory bowel disease (IBD). The most common complication of the antibody treatment is the reactivation of LTBI with a very rapid progression. This statement by the TBNET summarizes knowledge and the limitations of the currently available tests for the diagnosis of latent tuberculosis infection in patients medicated with anti TNF therapy.

An uniform international guideline on how to proceed in the prevention of reactivation of LTBI during biological treatment is not adopted yet. The clinical practice should be based on past experiences, showing that the number of reactivation of LTBI minimizes the active screening prior to biological treatment. Rigorous tuberculosis screening prior to initiation of biological therapy significantly reduces the number of reactivation of LTBI, up to 85%. In several countries in recent years were adopted the national guidelines for prevention of reactivation of LTBI, which reflect the regional prevalence of TB in the population and the penetration of the BCG population.

A significant role in the prevention of reactivation of LTBI during biological treatment should play quality of interdisciplinary cooperation, making it possible to stratify the risk of LTBI for each patient individually. Each patient has to be examined by specialist for TB before the start of the biological treatment and this has on the results of tests recommended or not recommended the treatment.

The more effective way to avoid reactivation is the treatment of the LTBI. A number of countries have generated national guidelines to deal with LTBI before treatment with TNF- α antagonists with significant differences regarding tuberculin skin test (TST), TST details on positivity, IFN-gama release assay (IGRA), and treatment. When LTBI is entertained, adequate prophylactic treatment should be started before treatment with TNF- α antagonists. Current recommendations of 3 to 4 weeks treatment with isoniazid prior to starting biologic therapy may be useful to ensure adequate INH tolerability.

Implementation of local guidelines tailored to background to deal with LTBI before starting TNF- α antagonists significantly decreases the number of active tuberculosis cases during treatment LTBI treatment for 9 months with 300 mg daily, for 9 months is recommended by most national guidelines and CDC. In this case, delaying the starting of TNF- α antagonists for 4 weeks is a safe approach. TST is inadequate to assess evidence for LTBI in BCG-vaccinated individuals due to its poor specificity. IGRAs are in vitro tests that rely on the rapid production of IFN- γ by circulating mononuclear cells in response to antigens that are more specific for the detection of *M. tuberculosis* infection than PPD. IGRA testing in patients with immune-mediated inflammatory diseases is feasible due to a strong correlation with risk factors for TB and a low percentage of indeterminate results.

solovic@hagy.sk

Intra-auricular and peri-articular masses and mass like conditions

Sunita Dhanda
National University Hospital, Singapore

Definitive determination of the cause of articular swelling may be difficult based on just the clinical symptoms, physical examinations and laboratory tests. Joint disorders fall under the realms of rheumatology however; sometimes patients with joint conditions manifesting primarily as intra-articular & peri-articular soft tissueswelling may mimic a tumor and get wrongly referred to an oncology department. In such a situation, an onco-radiologist needs to think beyond the obvious and consider the diagnoses of various non-neoplastic arthritic conditions, clinically masquerading as masses besides the usual neoplastic lesions. Differential diagnoses of articular lesions include infectious and non-infectious synovial proliferative process, degenerative lesions, deposition diseases vascular malformations, benign & malignant neoplasms and certain miscellaneous conditions. Many of these diseases have specific imaging findings. Knowledge of these radiological characteristics in an appropriate clinical context will allow for a more confident diagnosis.

sunitadhanda63@gmail.com